NORTH MAHARASHTRA UNIVERSITY, JALGAON-425 001

Syllabus For

BBS (SYSTEM MANAGEMENT)

W.E.F. JULY- 2001

0

6.2 (V)A - Visual Basic
6.2 (V) B - Oracle
6.2 (V) C - Object Oriented Programming in Java
6.2 (V) D - Project

NORTH MAHARASHTRA UNIVERSITY, JALGAON

Syllabus for - BBS (SYSTEM MANAGEMENT)
Unit course No. 6.2 (V)- A
Subject Name: Visual Basic

1. THE VISUAL BASIC ENVIRONMENT
Introduction to GUI. Why Windows and Why Visual Basic, Event based model of Visual Basic. How to start VB, Overview of developing a VB application. Initial VB Screen, SDI environment, Toolbar. toolbox, Help System, Use of different menus of Visual Basic's initial screen.

2. ELEMENTS OF TOOL BOX
Command buttons, Image controls, Text Boxes, Check Boxes, Radio Buttons. frame Control, Scroll Bar, List controls. Labels, Starting new project, Introduction to form, creating different controls in project

3. USING PROPERTIES WINDOWS
Changing properties of Various controls that are used in project. Default property, Boolean Property, Name , Label, BackColor. Forecolor. Caption, Font, height, width. Visible, Tool Tip text. Left, Top, Text, MultiLine. ScrollBars etc.

4. DIFFERENT EVENTS FROM VISUAL BASIC
Click, Dblclick. Change, MouseMove, MouseDown, changes etc. Using Code Window, Message Boxes, Input Boxes, Variable types, Declaring Variables, Declaring Constant, Operators: Arithmatic, Relational.

5. USING DIFFERENT BUILT-IN FUNCTIONS FROM VB
Format, val. Str. Chr. Date, Len, Ltrim. Rtrim, Ucase. Lcase, RGB, Strcmp, Rnd, Numeric Functions, Financial Function, etc.

6. USING DIFFERENT CONTROL LOOPS TO CONTROL THE PROGRAM FLOW
For loop. Nested for loop, Do...Loop....Until, Do....While, While....Wend, If....then. If....Else., Select Case

7. PROCEDURES AND FUNCTIONS

Declaring User-defined function and procedure, Trapping different Errors.

8. INTRODUCTION TO GRAPHICS

Lines, boxes, Circles, Ellipses, Curves, Pixel Controls, Shape controls

9. DEVELOPING SIMPLE FORMS

Using various controls build forms, change properties of controls to suit the application. Attaching codes after catching the events.

10. USEING DATABASES FEATURES

Introduction to Modern databases, Using data control, Programming with data control , Accessing Data from Databases such as Foxpro, Dbase IV

11. CREATING REPORTS

How to enter data in the tables using forms. Writing & using various queries to generate reports as per the user requirement. Study of data reports.

NORTH MAHARASHTRA UNIVERSITY, JALGAON

Syllabus for - BBS (SYSTEM MANAGEMENT)
Unit course No. 6.2 (V)- D
Subject Name: Project

Report - 60 marks
Viva-voce - 40 marks

In the project work, a student is expected to find out a software solution to any management related problem or to develop a software which will add value to the organisation. Student may select any topic for project report which will be based on the syllabus covered in system management.

***

Syllabus for - BBS (SYSTEM MANAGEMENT)
Unit course No. 6.2 (V)- C
Subject Name: Object Oriented Programming in Java

1. An Introduction to Java

   Java as a programming tool, Advantages of Java, Buzzwords, Java and Internet

2. The Java Programming Environment

   Navigating Java Directories, Windows 95/98 as a programming environment, Compiling and Running Java Programs, Using text pad. Graphical applications

3. Fundamental Programming Structures in Java

   Data types, variables, assignments and initializations, operators, strings, control flow, class methods (User defined functions), arrays

4. Objects and Classes

   Introduction to object oriented programming, Objects, relationship between classes, Using existing classes, Building our own classes

5. Inheritance

   Inheritance hierarchies, working with subclasses, casting, Abstract classes. Protecting access

6. Interfaces and Inner Classes

   Interfaces : Using an interface, properties of interface, interfaces & Callbacks

7. Graphics Programming

   Introduction, Creating a closeable frame, Terminating graphics programs, frame layout, Drawing shapes from lines, Drawing rectangles & ovals, filling shapes

8. Exceptions & Debugging

   Dealing with errors, catching exceptions, Debugging Techniques

9. Streams & Files

   Streams : Reading & writing bytes. Layering stream files, data streams, Random access file streams, ZIP file streams, Object streams, File Management

NORTH MAHARASHTRA UNIVERSITY, JALGAON

Syllabus for - BBS (SYSTEM MANAGEMENT)
Unit course No. 6.2 (V)- B
Subject Name: Oracle

1. REVIEW OF RDBMS CONCEPTS

Oracle - A Relational Database Management System, Database Administrator (DBA), Database Users, Concept of Normalization including 1NF, 2NF, 3NF

2. INTERFACING WITH ORACLE DATABASE
-Basics of structured Query Language (SQL),
-Data Definition Language (DDL) statements - Creating a table by CREATE TABLE, Modifying a table by ALTER TALBE, Deleting a table by DROP TABLE, Displaying a structure of table by DESCRIBE, Renaming a table by RENAME·

-Data Manipulation language (DML) statements : Inserting Record by INSERT, Updating Record by UPDATE, Deleting Records by DELETE
-Concept of Views
-Database constraints : NULL/NOT NULL, CHECK, UNIQUE, DEFAULT, PRIMARY KEY, FOREIGN KEY
-The ORCACLE Data Types

4. INVOKING SQL * PLUS

-Basic structure of a query with SELECT, FROM, WHERE
-Selecting specified rows & Colums through SGL
-Operators in ORACLE : Arithmetical, Relational & Logical
-Pattern Matching using LIKE
-Arranging the data by ORDER BY, GROUGH BY, HAVING
-Checking data by IN, BETWEEN, ALL, ANY, EXISTS, etc.
- Working with ORACLE functions
    Arithmetical functions ,Character functions
-Queries using multiple Tables

5. BASICS OF PL / SQL

- -Additional Data types, Variables, constants
- -Structure of PL/SQL BLOCK.
  - DECLARE, BEGIN, EXCEPTION
- -Handling Tables in PL/AGL
- -Manipulation data from databases using PL/SGL
- -Cursor
  - Opening a cursor, Defining a Cursor, Fetching a Cursor, Closing a cursor, Handling cursors using % FOUND, % NOTFOUND, % ROWCOUNT
- -Explicit and Implicit cursors
- -Conditional Statement IF-ELSE-EMDIP
- - Looping Statements LOOP-ENDWOP, WHILE,FOR
- -Displaying messages on screen DBMS-OUTPUT, PUT-LINE

****